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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/538,086 | 06/08/2005 | Kenichiro Aridome | SON-3122 | 6679 |
| 23353 7590 08/18/2009 RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036 | | | | |
| EXAMINER | | | | |
| SINFL BEHROOZ M | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2621 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 08/18/2009 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,086

Applicant(s)

ARIDOME ET AL.

Examiner

BEHROOZ SENFI

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 6/8/05, 2/3/06, 10/31/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is noted that the invention as claimed is directed to "a scalable video encoding method comprising". Such invention is non-statutory: Because; the invention as claimed is not falling within one of the four statutory categories of invention. Supreme Court precedent and recent Federal Circuit decisions indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example the invention fails to positively tie to another statutory class or structure by the inventive steps of the claim, such as device or apparatus recited within the claims to accomplish the method claimed.
3. Claims 9-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

It is noted that the invention as claimed is directed to "a program for", such invention is non-statutory and fails to satisfy the Interim Guidelines for Examination of

Patent Applications for Patent Subject Matter Eligibility, MPEP 2106.1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani et al. (US 2004/0247296) in view of Sugahara et al. (US 2003/0154687).

Regarding claim 1, Nakatani discloses, a video-encoding device for encoding video signals (i.e., figs. 5-6) and exerts control over the encoding according to an occupied amount of a virtual buffer (i.e., figs. 6 and 10, paragraph 0098), the occupied amount being determined based on the amount of codes generated through the encoding and the amount of codes transferred to an output destination (i.e., system control unit as shown in figs. 5-6 and 10), the video-encoding device comprising; recording-mode determination means for determining whether or not seamless connection between a preceding chapter and the following chapter that are included in the video signals is feasible (i.e., abstract, lines 16-20, paragraph 0014-0017) and setting an initial value of the occupied amount of the virtual buffer based on the determination result (i.e., paragraph 0098 and 0103, 0117-0120).

Nakatani is silent in regards to explicit of, occupied-amount update means for updating the occupied amount of the virtual buffer every time the encoding is performed, optimum-occupied-amount calculation means for calculating a

predetermined optimum occupied amount based on the updated occupied amount of the virtual buffer, target-code-amount calculation means for calculating a predetermined target-code amount based on the video signals of the following chapter, target-code-amount adjustment means for adjusting the 25 target code amount so that the sum total of the occupied amount of the virtual buffer and the target code amount does not exceed the optimum occupied amount, and encoding means for performing the encoding based on the adjusted target code amount.

Sugahara (i.e., figs. 4-5 and 7-17, page 14, paragraphs 0179-0181, page 15, paragraphs 0185-0186, 0190-0197 and 0209) teaches the above subject matter.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to improve the video/audio compression of Nakatani in accordance with the teaching of Sugahara, in order to enable the depiction of navigation data for depicting a reproduction control video object, as suggested by Nakatani (paragraphs 0039-0040).

Regarding claim 2, the combination of Nakatani and Sugahara teaches, the video-encoding device according to Claim 1, wherein the recording-mode determination means determines an occupied amount of the virtual buffer immediately before the video signals of the following chapter are transferred to the virtual buffer to be an initial value of the occupied amount of the virtual buffer, where the seamless connection is feasible, and sets the initial value of the occupied amount of the virtual buffer to zero, where the seamless connection is infeasible (Nakatani, page 5, paragraphs 0078-0079

and page 8, paragraph 0134, reset and/or not reset, which is equivalent to setting the amount of buffer to zero).

Regarding claim 4, the combination of Nakatani and Sugahara teaches the video-encoding device according to Claim 2, wherein the optimum-occupied-amount calculation means calculates a predetermined value that is equivalent to and/or as large as the updated occupied amount of the virtual buffer, as the optimum occupied amount (Sugahara, paragraphs, 0196 and 0209).

Regarding claim 5, the limitations claimed have been addressed in claim 1 above.

Regarding claim 6, the limitations claimed have been addressed in claim 2 above.

Regarding claims 7-10, please refer to claim 1 above.

Allowable Subject Matter

6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Behrooz Senfi whose telephone number is 571-272-7339. The examiner can normally be reached on M-F 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone

Art Unit: 2621

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Behrooz Senfi/
Primary Examiner
Art Unit 2621

